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(54) Title: The Biopolymer Extraction Process

(71) Applicant(s): Cooperativa dos Produtores de Cana, Açúcar e Álcool do Estado de São Paulo Ltda (*Sugar Cane, Sugar, and Alcohol Production Cooperative of the State of Sao Paulo, LTD*)
COPERSUC (BR/SP) Instituto de Pesquisas Tecnológicas do Estado de São Paulo S/A-IPT (BR/SP) (*Institute of Technological Research of the State of Sao Paulo*)

(72) Inventor(s): Silas Derenzo, Rosa Mitiko Salto Matsubara, Gracinda Martins Correia Garofalo, Alice Maria de Melo Ribeiro, Celso Leila Bueno Nuno, Paulo Eduardo Moretto, Carlos Eduardo Vaz Rossell

(74) Patent Agent: Fernando Garcia Gnouchi

(57) Summary: Patent for "THE BIOPOLYMER EXTRACTION PROCESS" the cells containing biopolymer are subjected to a single adequate solvent and polymer insolubility in the solvent is achieved without an insoluble agent.

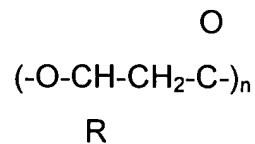
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Descriptive Report of the "BIOPOLYMERS EXTRACTION PROCESS" Invention

INTRODUCTION

There are various types of soil bacteria that accrue reserve materials under unbalanced growth conditions. In some specific types, the materials are the polyhydroxyalcanoates (PHA), which are aliphatic polyesters, are insoluble in water, and repeat the following structure:



Where,

R, belongs to the n-alkyl group and contains a variable length

(R= methyl, hydroxybutirate (HB))

(R= ethyl, hydroxyvalerate (HV))

(R= propyl, hydroxycapranoate (HC))

(R= buthyl, hydroxyheptanoate (HP))

(R= penthyl, hydroxyoctanate (HO))

The PHA microbial polymer can reach between 10% to 90% of the bacteria's dry weight. This is a thermoplastic polymer that contains characteristics analogous to those found in conventional plastic resins. In addition, this polymer is biodegradable.

The cells that contain a high degree of the biopolymer